Town of Penn-Craft Penn-Craft Fayette County Pennsylvania

HABS PA, 26-PECR, 2-

PHOTOGRAPHS

WRITTEN HISTORICAL AND ARCHITECTURAL DATA

Historic American Buildings Survey National Park Service Department of the Interior Washington, D.C. 20013-7127

HISTORIC AMERICAN BUILDINGS SURVEY

TOWN OF PENN-CRAFT

HABS No. PA-5920

Location:

Penn-Craft

Fayette County (western half)

Pennsylvania

Significance: The Town of Penn-Craft was developed as part of a broad reaching effort of the New Deal era intended to relieve the dire economic rural conditions which existed in the 1930s. Unlike other government sponsored subsistence homesteads, Penn-Craft was initiated by a private agency, the American Friends Service Committee. As an experiment in environmental and social reform, the development of Penn-Craft was meant to improve the standard of living and enable home ownership through the design of practical small houses and the implementation of a landscape plan for rural communities.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: 1937-42

- 2. Architect: William Macy Stanton was chosen for the design of the community and its buildings. Stanton, a Quaker architect, was the designer of several Atlantic City hotels in the 1920s, along with a number of meeting-house restorations. In the 1930s, the federal government hired him to design the Tennessee Valley Authority community at Norris, Tennessee, as well as Cumberland Homesteads, a subsistence-homestead community for stranded miners, also in Tennessee. The houses at Penn-Craft bear a striking resemblance to those at Cumberland Homesteads; houses in both communities are simple, one-and-a-half-story structures built of stone.
- 3. Original and subsequent owners, occupants, uses, alterations and additions: Today in the original portion of Penn-Craft, the stone houses retain much of their integrity and many of the original families—if not the original homesteaders—keep the Penn-Craft Community Association active. But signs of change are interspersed throughout the community. The old factory building has fallen into decay, and the cooperative barn and farm are long gone. Recently, the Community Association opposed a liquor license for the new owners of the Penn-Craft store; the Friends made Penn-Craft a dry community and the residents want to keep it that way. But the most notable change is the increasing construction of new homes.

The large house lots, once intended for subsistence gardens, have been subdivided. Many of the poultry houses—the original, temporary housing—have been converted back to permanent homes. New houses, sharing the land with these older buildings, are also a significant part of Penn-Craft's history, for they are owned not by newcomers, but by the children and grandchildren of those first fifty families. In some instances, several generations have maintained their ties to the family homestead. Consider original homesteader Joseph Shaw, Sr.'s, family: after World War II, brothers Joe and Jim built houses next door to each other in Phase II; their sister Dorothy Shaw Dankovich also lives in Phase II, as do her two children and Jim's son Francis. Alice Shaw Illig, who married into another homesteader family, now lives in the St. Clair family's stone house in Phase I; her daughter and son-in-law built a new house on the same property. Virginia Shaw Balog lives in the stone house her father built, sister Charlotte Shaw Orslene owns the Shaw temporary house, now occupied by daughter Kathleen Orslene Groves. Then there are the Carps: J. C. Carp, Jr., lives in the remodeled temporary house, which he has covered with Perma-Stone in imitation of the stone house occupied by his son Jay. Similarly, Bona Billiani moved into her remodeled temporary house so that son Gene

and his family could have her stone house. Rev. Thomas Logston returned to Penn-Craft in 1964 after graduate school, intending to buy his father's homestead, but was too late; undaunted, he bought the next stone house in Penn-Craft to come on the market--in 1975.

The staunch loyalty that these and other second- and third-generation families demonstrate is as much a characteristic of Penn-Craft as the stone houses. But unlike the continuity of architecture, the continuity of people is an indication that the "social roots" that the homesteaders planted have blossomed. According to one resident, "The Penn-Craft community is alive and well."

B. Historical Context:

Penn-Craft's fifty original homesteading families came to the community in 1937 with the hope of finding a steady job, a home of their own, and a new way of life. Clarence Pickett, executive director of the American Friends Service Committee (AFSC) and a former deputy in the federal Division of Subsistence Homesteads, remarked:

Anyone driving through Fayette County, Pennsylvania, in 1936, saw mountainsides covered with scrubby timber, a few active coal mines, and many shabby remnants of once prosperous mining communities. Stark rows of dilapidated shacks in lifeless mine "patches" were nearly as grim as the faces of a once industrious population, now unemployed.²

Having worked closely with the federal Division of Subsistence Homesteads, the AFSC saw the weaknesses of the federal projects as inflexible government regulations and procedures, and an emphasis on completion over education. Stranded miners, the Friends believed, needed much more than a temporary handout; they needed to develop new skills, both social and economic. The AFSC community would therefore place much more emphasis on rehabilitation and education than the federal program. Moreover, being smaller than most federal homesteads and less structured, the new project would be more responsive to homesteaders' needs.

Experimental by nature, the project endeavored to serve as a model for other distressed areas of the country. Indeed, as project manager David Day stressed to the homesteaders, "We are all part of a great experiment in the world of economics and human relations. Any degree of success we attain together, shall not be for ourselves, alone, but for millions of other people." And as the homesteaders themselves concluded, "Our experience has shown that, given a fair opportunity, a group of miners or average working men banded together because of their common desire to reestablish themselves in a new environment as home owners and responsible citizens can build an upto-date community and create a desirable place in which to live." That place was Penn-Craft.

¹Robert Jameson, interviewed by Margaret M. Mulrooney, 20 June 1989.

²Clarence Pickett, For More than Bread (Boston: Little, Brown and Company, 1953), 67.

³Louis Orslene and Susan Shearer, "National Register Nomination: Penn-Craft Historic District" (National Park Service, 1989); Penn-Craft Tenth Year Anniversary.

PLANNING AND DEVELOPMENT

Unlike the government subsistence homesteads, Penn-Craft was privately funded. The Friends were able to raise nearly \$185,000 for their experiment at Penn-Craft, \$100,000 of it for a revolving fund to be replenished by the homesteaders' gradual purchase of their homes. The largest contribution--\$80,000-came from the U.S. Steel Corporation, owner of many of the defunct coal and coke operations in the area. Other large contributors included the W. T. Grant Foundation (\$45,000), A. W. Mellon Educational and Charitable Trust (\$30,000), Marquette Charitable Organization (\$10,000), and William C. Whitney Foundation (\$9,000).

When the Friends began searching for potential sites on which to implement their "great experiment," Fayette County seemed an obvious choice. The AFSC was already familiar with the plight of miners because it had conducted an extensive child-feeding program there in 1931. In addition, officials from AFSC, working under the auspices of the federal government, had looked at the county in 1933 as a potential location for a new subsistence-homestead project. But since no single site was large enough, the government homestead was located instead in Westmoreland County.⁵

At first the Friends hoped to build their cooperative community around the existing coal town of Tower Hill, a patch near Republic. Owned by the Hillman Coal and Coke Company, Tower Hill offered plenty of housing for prospective homesteaders, but the Friends could not reach an agreement with the company over the purchase price. Since Tower Hill was the only coal town for sale in the area, the AFSC called a conference in Philadelphia on September 14, 1936, to discuss options. Committee members concluded that "company towns present almost insuperable obstacles to the development of an effective educational program," and presented "problems of control," as well.⁶

A committee of three scouted out suitable properties. The AFSC had sent Errol Peckham and his family to live in Republic, and Levinus K. Painter and his family to live in Brier Hill. They were joined by project manager David W. Day. With the purchase of the Isaiah N. Craft farm in Luzerne Township in March 1937, the experiment officially began.

The Craft farm was ideally located. Situated two miles west of Republic, the AFSC's local base of operations, the site was only eleven miles northwest of the county seat of Uniontown, and forty-five miles south of Pittsburgh. The farm, which comprised 200 acres, was surrounded on all sides by coal communities, some large, like Republic, others small, like Thompson No. I--but all in need of relief. Fifty families, proportionately representing Fayette County's dominant ethnic groups, were finally chosen from among hundreds of applications. Homesteaders had to be American citizens, or in the process of being naturalized. By limiting the project to Americans, Peckham hoped to

⁴American Friends Service Committee, "Evaluation of Experiences at Penn-Craft During Three-Year Period 1937-1940," 26.

⁵AFSC, "Evaluation of Experiences," 1.

⁶American Friends Service Committee, "Conference Concerning the Fayette County Project," 14 September 1936, AFSC Archives.

"squash any Red Scare stuff," referring to complaints that the project was too socialistic. Five black families were included, although one dropped out.

The Friends strongly believed that the success of the community depended upon the selection of suitable individuals—that is, families who shared the AFSC's commitment to the project, and who could demonstrate a willingness to work toward a common goal. Special consideration was also given to the age of each family member, financial resources, and productive capacity. As a result, the application procedure was considerably more intensive than that of the federal government.

Errol Peckham interviewed most of the applicants for the AFSC. Living in one side of a semi-detached company house in Republic, Peckham and his wife became acquainted with a number of families in the area. At the behest of the Friends, Peckham had also established a small-scale subsistence garden program among the miners' families. By visiting and interviewing the families several times, and following up on their references, Peckham was able to ascertain the extent of each family's general character and interest in the project. Final acceptance depended upon a small test: the applicant had to work at the project on a trial basis. The Friends wanted to be sure that everyone was aware of the personal commitment and sacrifice needed, and indeed, despite the cash earned, a number of men immediately withdrew when confronted by the amount of physical labor involved. One man, after putting in six hours, threw down his shovel, saying, "I'm going home. I work on the WPA [Works Progress Administration] and we never work more than six hours a day."

Work on the community progressed steadily through the application period, which extended well into 1938. Streets were laid out and surveyed, lots were plotted, land cleared, and a water system arranged. Each of the fifty homesteads would have one house and several outbuildings. The appearance of these structures, however, differed greatly from the original concept.

CONSTRUCTION

Houses for homesteaders necessarily had to fall within a realistic price range. From their initial investigation of the county, the Friends had calculated \$10 as the maximum amount miners could afford to pay each month toward a house. At the 2 percent rate of interest and twenty-year amortization period planned by the AFSC, a loan of \$2,000 was decided as the maximum amount available to any homesteader. Taxes and insurance increased the monthly payment by about \$3. The AFSC's budget was \$180,000. Of this, \$100,000 was dedicated to the revolving fund, to be lent to the fifty families, \$2,000 each. The remainder was used for staff salaries and construction equipment, so that the project was subsidized by more than one-third. In addition, the mortgage was below market rate. The \$2,000 cost of the house, land, and infrastructure did not include the 2,500 hours of labor that each homesteader put in on his and his neighbor's houses. 10

⁷Memorandum from Errol Peckham, Republic, to Homer Morris, Philadelphia, 8 January 1937, AFSC Archives.

^{8&}quot;Self-Help Cooperative Housing," Monthly Labor Review 49 (September 1939): 567.

⁹Penn-Craft Tenth Year Anniversary.

¹⁰AFSC, "Evaluation of Experiences," 4, 9.

David Day, as project manager, was responsible for the acquisition of supplies. Through his efforts, the project acquired equipment that enabled the homesteaders to drill, cut, blast, and dress the stone themselves. Day also found a small, used stone crusher, which enabled the men to grind broken stone into sand for concrete. The cost of materials was further reduced by the proximity of the project to hundreds of beehive coke ovens that were being dismantled by coal companies for tax purposes, and could be used as building material. Each coke oven was sold separately, and yielded reusable dressed stone and fire brick. Residents of the community also remember raiding abandoned houses for building materials. Wood for door and window frames, joists, and rafters were cut in nearby mills from trees felled by the homesteaders on the property.

The Friends were adamant in their belief that the success of the project depended upon the participation of homesteader families in the construction of their homes, stating that "the construction of the houses by the men themselves was more than a construction job. It was the core of the educational program." On the practical side, house construction imparted skills such as carpentry, wiring, and plumbing that might help sustain them in times of economic trouble. More important, however, it would "help create neighborliness and a cooperative spirit which will send the social roots deep and give permanence and strength to the whole experiment." 12

In the initial stages of the project, work consisted of clearing land, plowing the cooperative farm, and preparing materials; later, crews were sent out to excavate basements, lay up walls, mix concrete and so on. The crews were composed of men and boys who worked on a system of credit hours much like that of the federal projects. Boys, age 16 to 19, earned "boy hours," or three-quarters of a man hour. At the end of the day, each man and boy reported the number of hours he had worked, and on what job. Thus, a man who put in eight hours of labor on a neighbor's house had eight hours of labor owed on his own dwelling. The basic house required about 2,750 hours, not counting hours for finishing work that was left to the occupant. Ten hours was the recommended amount a homesteader should put in each day, although this was adjusted to suit the individual's schedule. When construction on a homesteader's house ended, so did his participation in the credit-for-labor system.

In addition to men and boys, a third group of laborers was known as "campers." The campers were a group of fifty young college students, mostly Friends themselves, who volunteered in the summer to aid the project. The young men participated in house construction, more than doubling the number of work crews, while the young women conducted informal classes for the homesteader children; a few of the female campers, "conspicuous in their shorts," according to investigator Frederick L. W. Richardson, pitched in with the farmwork. The campers also contributed to the social life of the community by organizing dances and games, and to the economic life by patronizing the cooperative store. 15

¹¹Joe Shaw, Estel Debord, and J. C. Carp, Jr.

¹²AFSC, "Evaluation of Experiences," 6; AFSC, "Turning Liabilities into Assets," AFSC Archives.

¹³Sheppard, 224.

¹⁴Day, "Memorandum to Homesteaders."

¹⁵Frederick L. Richardson, Jr., "Community Resettlement in a Depressed Coal Region," <u>Applied Anthropology</u> (October-December 1941): 41.

Construction on the houses began in Section 1, and was to progress through the community, section by section, and lot by lot. Very quickly it became apparent that this method was unsatisfactory, for unemployed homesteaders would end up building houses for the employed homesteaders. Some of the men were still working part time in the mines and could not devote as many days a week to the project as others. Then, too, some men were simply more conscientious than others about putting in a full day's work. Heremore, some of the men were paid their labor debt in the form of boy hours contributed by their sons. Most of the community objected to this practice for two reasons: first, the purpose of house construction was to teach new skills to the homesteaders themselves, not just their children; and second, the labor of boys lacked workmanship and productivity compared to adults. Last, there was a tendency to perform less work on a neighbor's house than on one's own. To encourage equal participation, the Work Committee--which included Day and five elected homesteaders--decided that houses would be built according to how many hours a man had to his credit instead of by lot number. When it came time to start excavating basements, Pete Stermock's house was first since he had the most hours.

TEMPORARY HOUSING

There was also the problem of distance. Few of the miners had their own cars, and so found it difficult to make the journey to and from the Craft farm every day. The solution, provided by the homesteaders themselves, was to erect temporary dwellings on the site in the form of poultry houses. Poultry houses were part of the original plan, and by building them first, the family could live on site and apply the time usually spent in transit toward construction. David Day made some quick estimates, and found that with a little extra time and money, "a 20' x 40' poultry house of the Pennsylvania State College Type" could be built. The cost would be \$350 per house for materials, which the AFSC would supply from the general project fund. The homesteaders, under supervision of a professional carpenter, would supply the labor. Furthermore, until the stone houses were completed, the homesteaders would contribute \$10 per month as rent on the temporary houses, to be deducted from the initial loan. Pleased at the initiative shown by the homesteaders in solving this dilemma, the AFSC in Philadelphia approved the plan wholeheartedly.¹⁷

Like the stone houses, the temporary houses were small. As built, the temporary houses measured 20' x 20' and had one big all-purpose room with a coal stove in it, plus a small unheated bedroom. They were described as "cozy living quarters for small families without too much furniture, but life in them was somewhat difficult at times for the larger families." 18 Mrs. Joseph Shaw, Sr., could not fit all of the furniture she had brought from Brownsville, Pa., into her temporary house, and left the remainder outside.

In some cases, a 10' x 12' brooder house was attached to one end of the structure for extra space. Joe Shaw recalled that he and his two brothers slept in the brooder house, and on several nights snow blew through the cracks onto their beds. On really cold nights, he said, they moved their mattresses inside and huddled with their parents and six sisters around the stove. Similar conditions were reported by J. C. Carp. In fact, the Carps' brooder house still retains remnants of old stockings and rags stuffed into the cracks. The uninsulated walls, made of 2" x 4"s, were clad with board-and-

¹⁶AFSC, "Evaluation of Experiences," 7.

¹⁷David Day to Homer Morris, 17 May 1937, AFSC Archives.

¹⁸Penn-Craft Tenth Year Anniversary.

batten siding outside and tongue-and-groove boards inside. Estel Debord's wife, Mary, who moved from a large company house at Isabella into a temporary house in 1945, was dismayed when she saw what was to be her first married home. The house had a concrete floor, a door that would not close properly, and spiders. She did not think the temporary house was as nice as her childhood home in Isabella, but her father-in-law's stone house at Penn-Craft was "like a mansion," and its indoor bathroom, "a novelty, a step up." The Debords lived in the temporary house until 1952, when homesteader Charles Debord died, and left the stone house to his son, Estel.

In 1938 the AFSC contracted with the Harvard Business School to conduct an investigation of the project to date, emphasizing the methods used to rehabilitate the miners. For more than a year, Frederick L. W. Richardson, Jr., lived in Penn-Craft and participated in its development. Richardson concluded that crowded conditions in the temporary houses put pressure on some homesteaders, especially those with large families, to finish their stone houses quickly. To illustrate his point, Richardson described a typical evening scene wherein the youngest children would be sleeping, the middle children playing, an elder daughter entertaining her beau in the corner, and the parents trying to preside over all. One young woman lamented, "Here there is no privacy. The small houses are getting on our nerves." And the homesteaders' discomfort merely grew as construction of the stone houses dragged on.

THE COOPERATIVE COMMUNITY

As a cooperative economy was a primary object, the AFSC made sure that no one would forget the purpose of the community by writing it into the individual lease agreements:

WHEREAS, Management secured said land and subdivided it with the idea of developing it for the purpose of a cooperative community composed of individuals and families who will build and occupy homes on the said land under the terms hereinafter set forth and will cooperate with each other for the common good and exercise a control over the community and its various interests for the mutual benefit of all the members thereof; ...²¹

The intentions of the AFSC were to insure the involvement of the homesteaders in the governance of their own affairs as much as possible, and as soon as possible, so that the operation of the whole community could be turned over to the residents.

While construction of the community was the major cooperative venture, other instances of cooperative decision-making occurred, such as the proposal and selection of a suitable name for the community. Various names were suggested, including Friendsdale and Luzerne Gardens, but in August 1937, the group voted for Penn-Craft, combining the names of the first and last owners of the property.

¹⁹Joe Shaw; J. C. Carp, Jr.; Mary Debord, interviewed by Margaret M. Mulrooney at Penn-Craft, 21 June 1989.

²⁰Richardson, 36.

²¹American Friends Service Committee, Lease agreement, photocopy in the possession of Louis Orslene, Fairbank, Pa.

The Community Association, formed in early October 1937, institutionalized the cooperative community. Each family had a voice through its two votes, generally belonging to the homesteader and his wife. A meeting was called once a month during the construction process to discuss any problems openly. Officers were elected regularly from the ranks of the homesteaders, with the three Friends—Day, Peckham, and Painter—serving as advisers and moderators. The other organizations that were created, such as the Mothers' Club, Library Committee, Work Committee, Religious Life Committee, Girls Club, and Boy Scouts, reported to the Community Association. In addition to these, the Friends established a community center in the old Craft farmhouse, where homesteaders could attend programs on farming, canning, nutrition, childcare, health practices, and engage in various social activities, such as dances and parties. Participation in these programs was not mandatory, but attendance was usually high.

While the AFSC actively promoted the formation of these committees and clubs, their success was due to the homesteaders' continued interest and enthusiasm. As the Monthly Labor Review concluded, "There is hardly an activity for which provision has not been made." The Mothers' Club, for example, was organized by nurse Martha Landes in 1936 at the Orient mining patch to educate miners' wives about modern health-care practices. The Penn-Craft mothers sponsored a number of programs, including clothing drives and a nursery school, but their most important venture was the Well Baby Conference held in summer 1938. With the participation of several local doctors and several state nurses, the conference was an annual local event until the formation of a Tri-County organization, which took over administration of the program in 1946. The homesteaders also enjoyed The Penn-Craft, a monthly newsletter that began in May 1939 and reported on various events.²⁵

Following the AFSC's lead, the homesteaders soon took it upon themselves to organize committees for their various needs: the Community Center Committee took care of the maintenance of the old Craft farmhouse, which served as Penn-Craft's community center; the Community Life Committee sponsored sports activities such as baseball; the Memorial Committee organized the construction of a community Honor Roll after the war; and the Religious Life Committee addressed the homesteaders' spiritual needs.

When the Friends started Penn-Craft they deliberately adopted a policy of non-interference in matters of religion. Most of the homesteaders belonged to local churches and were encouraged to continue their individual practices. A number of families, however, were unable to travel the distance between the project and their churches, and suggested to the field staff that some sort of religious group be organized at Penn-Craft. The Friends' response was to support the formation of a Religious Life Committee whose responsibility it was to organize Bible readings, discussions, and prayer meetings. Upon hearing of this, several local churches fired off letters to the AFSC in Philadelphia, expressing their concern that the homesteaders were being led away from their churches by the Friends. Once reasssured that the Friends had no such aims, the religious meetings were able to continue without outside interference. 24

²²David Day to Homer Morris, 30 June 1937, AFSC Archives.

²³"Self-Help Cooperative Housing," 572; <u>Penn-Craft Tenth Year Anniversary</u>; <u>The Penn-Craft</u>, 1 (25 May 1939), in the possession of Rev. Thomas Logston.

²⁴Penn-Craft Tenth Year Anniversary; AFSC archives.

Considerable care was taken by the Friends to assure that children, as well as adults, had plenty to do. Between 1940 and 1942, the Community Life Committee hired a recreational leader, Matt Wasko, to organize activities for the children during the summer. Having their children occupied and looked after during the day was a boon that enabled some mothers to work at the canning plant or factory. Older children often worked, too, whether at the factory, or picking tomatoes to be sent to the Heinz Company in Pittsburgh, or building houses. Children also had Little League, Boy Scouts, and the Girls Club to keep them out of mischief. Dorothy Shaw Dankovich laughingly said that "a kid couldn't get into too much trouble, because you had fifty mothers, not just one."

Since the goal of the community was to promote a long-term self-help subsistence program, the AFSC also established a cooperative farm to supplement each homesteader's subsistence garden. The farm and its associated pasture lands occupied about 110 acres of land around the community and formed a buffer zone between Penn-Craft and other nearby towns. Here the miners were taught the rudiments of agriculture, such as plowing, planting, and livestock care. The homesteaders produced vegetables, grains, meat, eggs, butter, and milk, and sold them to local markets for a modest profit.

The produce was also sold in the cooperative store, which began in summer 1937 in a converted cowshed with \$25 in capital. Since many of the men were still working part time in the mines, they continued to patronize nearby company stores. It therefore took several years to get the store on its feet financially, but by 1941 enough homesteaders had invested in it to allow the construction of a larger facility complete with Fayette County's first frozen-food locker plant. Attracting users from all over the county, the store—and frozen-food lockers—expanded in 1945. A cooperative venture, the store operated on the premise that each family who invested in it would receive a share of the profits. There was also a small canning operation where the women would gather to put up vegetables and fruits raised on the farm or in their gardens. 26

A crucial element of the AFSC's self-help program was the establishment of an economically viable industry that would provide new skills and an additional source of income when the mines were down. The selection was guided by several conditions: first, the industry had to provide a substantial number of jobs to the community; second, the jobs had to require as little training as possible; and third, the product had to be easily marketable. At first the Friends intended to establish a weaving program, and hired an experienced weaver to move to the community and teach his craft as a cottage industry. The venture failed within a year. The Friends considered several other possibilities, including a shoe factory, shirt factory, and a pottery, but finally they settled on a sweater-manufacturing operation. The AFSC proposed that if each family contributed 100 hours of labor to build the factory, management (the AFSC) would secure the necessary \$15,000 for materials and equipment. The proposal was accepted and a ground-breaking ceremony was held in October 1938.²⁷

The homesteaders united in the construction of the factory, working Saturdays and holidays to get it ready in time to receive spring orders. Like the houses, the eight-bay stone factory building

²⁵Dorothy Dankovich, interviewed by Margaret M. Mulrooney, 20 June 1989; Joe Shaw; J. C. Carp, Jr.

²⁶Sheppard, 226; Penn-Craft Tenth Year Anniversary.

²⁷Richardson, 35; Penn-Craft Tenth Year Anniversary.

was constructed with movable forms. The building was completed in January 1939, and in six months knitting machines were in place, employees trained, and markets found. The first large shipment, 2,500 sweaters, was sent out in July. But just as the factory seemed to get on its feet, a series of problems befell the fledgling mill. The war effort caused local mines to reopen, taking many of Penn-Craft's newly trained men and boys away from the mill. In addition, the nationwide draft drastically reduced the market for the factory's chief product--men's sweaters. In 1939-40, the AFSC put \$72,000 into the mill (beyond its investment in Penn-Craft), while it netted only \$56,000.²⁸ Salvation came in the form of the Louis Gallet Knitting Mills.²⁹

Louis Gallet, a New York native, trained the homesteaders' wives, young sons, and daughters to operate the knitting machines. Production remained steady enough throughout the war years to prompt an addition to the factory in 1945.³⁰ By 1947 the mill reached a peak employment of ninety-six persons drawn from Penn-Craft and other nearby communities. Gallet stated in the community's tenth anniversary yearbook, "We believe that this factory contributed in a small share to the success of this progressive community and we take great pride in being a part of the Penn-Craft community." Eventually, the knitting mill proved so successful that it again outgrew the Penn-Craft facility, and when the Gallets moved to a larger building in Uniontown in 1953, most of the employees stayed with them, traveling back and forth on a complimentary bus. Like many of the young homesteaders, J. C. Carp, Jr., started working for the Gallets in 1941 as a temporary means of earning money. The "temporary job" eventually stretched into thirty-four years and a factory superintendency. Gallet's widow still manages the Uniontown plant and, Carp said, the family's commitment to Penn-Craft was such that, "If a person went in today and said he lived in Penn-Craft, he'd have a job right away."³¹

One of the community's fondest memories is of the day in 1937 that Eleanor Roosevelt came to call. En route from Arthurdale to Westmoreland Homesteads, the First Lady was accompanied by Doris Duke, and her visit was intended to be low key. Homer Morris cautioned David Day that only a few families were to be notified in order to keep things as normal as possible. Word leaked out, however, and on the appointed day, every child in Penn-Craft skipped school to follow the big, black limousine around the community. The Friends, already planning an addition to the project, especially hoped that Duke would be impressed enough to make a donation, and were probably disappointed when she did not. Duke nevertheless made quite an impression; as she made her way through the streets, a white-gloved assistant handed out brand-new \$5 bills to the children.

COMPLETION AND CONTINUITY

Construction and occupation of all fifty stone houses were supposed to be accomplished by October 1941 but the effects of the war extended the date to 1942. With the outbreak of war in Europe in 1939, the coal mines began to go back into operation, providing employment to Penn-Craft residents, but slowing completion of their homes. Although homesteaders no longer had the time to work on their houses, they had the money to pay off their loans. By 1945, three homesteaders had

²⁸AFSC, <u>Annual Report</u> 1939: 36-37; 1940: 52-53.

²⁹Penn-Craft Tenth Year Anniversary; Orslene and Shearer.

³⁰ AFSC, Annual Report 1945: 15.

³¹Penn-Craft Tenth Year Anniversary, J. C. Carp, Jr.

completely paid for their houses, while thirty-nine others had advanced payments on their loans.³² Although most of the houses were occupied by 1942, some of the homesteaders continued to do finishing work for a number of years.

One measure of Penn-Craft's popularity is that it was expanded after the war. In 1946 the Friends began Phase II, the construction of fifteen ten-acre homesteads on adjacent land. The changes made here point to some of the perceived successes and failures of Phase I. Self-help construction, a key to keeping costs down, was again the foundation of the Phase II project.

The increased acreage provided greater flexibility and "greater economic security." The homesteaders were encouraged to retain the land as pasture until more intensive farming was needed. Designs for the houses were drawn from the Farm Security Administration publication Small Houses, thus eliminating the need for an architect. Construction material was cinder-block, not stone, although the homesteaders made their own cinder blocks. Half of the Phase II families were headed by returning servicemen, and many homesteaders were the sons and daughters of Phase I residents.

The financing was considerably different. Again, U.S. Steel made a major contribution, but the AFSC viewed Phase II as a more immediate revolving loan project. All of the project costs were factored into the cost of the units; each cost about \$3,000. Homesteaders were required to provide a downpayment of \$500 and take out a loan of \$2,500 at 4 percent interest from the AFSC. After a year, the homesteaders would refinance with a bank, repaying the AFSC's investment.³⁴

PART II. ARCHITECTURAL INFORMATION

A. General Statement

The first house plan for Penn-Craft came from David Day in a budget estimate dated December 20, 1936. Based on his experience as director of the Westmoreland Homesteads project, Day proposed the construction of one-story, frame dwellings measuring 20' x 38' on a concrete foundation. The houses were to have "a combined kitchen and dining room unit, a 15' x 20' living room, three bedrooms, a large pantry, a shower room, and running water," indicating that they lacked indoor toilets. The total estimated cost for such a house was a conservative \$1,100, which fit neatly below the \$2,000 ceiling placed on individual house loans by the AFSC. While the Friends advocated economical dwellings, they also wanted to stress comfort and permanency. This led to the rejection of Day's initial proposal in favor of a small, stone house with a full indoor bathroom, garage, and cellar.

For the design of the community and its buildings, the Friends selected William Macy Stanton, a Quaker architect. The designer of several Atlantic City hotels in the 1920s, Stanton was also the

³²AFSC, Annual Report 1945: 15.

³³Bulletin 896, 41, 42.

³⁴Sheppard, 228; Bulletin 896, 43.

³⁵David Day to Homer Morris, 10 December 1936, AFSC Archives.

architect of a number of meeting-house restorations. In the 1930s, the federal government hired him to design the Tennessee Valley Authority community at Norris, Tennessee, as well as Cumberland Homesteads, a subsistence-homestead community for stranded miners, also in Tennessee. The houses at Penn-Craft bear a striking resemblance to those at Cumberland Homesteads; houses in both communities are simple, one-and-a-half-story structures built of local stone. A much larger community (262 families), Cumberland Homesteads incorporated fifteen different house plans as compared to Penn-Craft's five. But while Cumberland homesteaders helped build their own homes, there is no evidence that their input was sought in the actual design process. At Penn-Craft, however, "each family selected a house plan [and] minor changes were permitted in each plan to meet the particular needs of each family." 36

Although the Friends wanted homesteaders to participate in the design process, they were unsure about how much deviation was economically feasible. The AFSC allowed each family to pick its own lot and house plan, and worked with the homesteaders to assure that a pleasing alteration of the different plans resulted in each section. Bona and Raymond Billiani selected a lot next door to the Fiors, friends from the same village in Italy, but to live there meant they could not have the design they wanted. Although there were five different designs for four-, five- and six-room dwellings, the Friends admitted that "five house plans, even with some changes, would fail to meet the needs of fifty different families." While the AFSC acknowledged that individually planned houses would be the ideal, the amount of time and money involved prohibited that option. In another memorandum to Homer Morris, Day explained the dilemma, saying:

I find myself very much baffled by this question of house design. I feel very sensitive to the viewpoint and desire of a homesteader who is anxious to have some say about the house he is planning to live in during the coming years. On the other hand, I recognize the impossible situation we get in unless we can have an architect right here on the job to work out the best thing in counsel with the families.³⁸

Finally, the AFSC decided that exterior dimensions would have to remain fixed, but minor changes to the interior floor plan would be permitted. Project architect Macy Stanton had to make several extended trips to Fayette County in order to work in the homesteaders' minor alterations.

All the houses in Penn-Craft were one-and-a-half-story stone structures with simple wood cornices and trim. Windows were usually defined by brick sills and lintels with keystones, while the front doors were framed by stone stoops and small concrete overhangs. These modern overhangs departed from the generally conservative style of the buildings. The use of native stone and gable roofs, reminiscent of Pennsylvania farmhouses, and the small size were in the tradition of the low-cost housing pioneered by the Division of Subsistence Homesteads.

There were five basic designs from which to choose, and four of them could be reversed in plan, to produce nine different options. A six-room house with a low, side-gable roof had a one-

³⁶Elizabeth Straw, "National Register Nomination: Cumberland Homesteads Historic District," (National Park Service, 1988); Orslene and Shearer; AFSC, "Evaluation of Experiences," 5.

³⁷AFSC, "Evaluation of Experiences," 5.

³⁸David Day to Homer Morris, 13 July 1937, AFSC Archives.

story, one-room, gable-roofed ell on one side of the main block, and a shed-roofed, frame porch extending from the other. The ell was usually aligned with the main facade.

In the five-room design, the main block had a front-gable roof, with a one-story ell to one side and a porch to the other. The ell had a shed roof and was usually set back from the facade. A variant of this was a front-gable dwelling with a gable-roofed ell. Although similar in appearance to the five-room design, the second floor was divided into three bedrooms, making this a six-room plan.

A symmetrical six-room dwelling was side-gabled with a center entrance and two dormers. The first floor had a living room, kitchen, bedroom, and a dining room—a rarity in these subsistence homestead projects. A porch extended from one side. Only three of these were built; the other forty-seven houses were fairly evenly spread among the other five—and six-room designs. Although four-room houses were mentioned in correspondence and reports, none survives. All the houses at Penn-Craft have at least two bedrooms on the second floor, and a kitchen, living room, and at least one other room on the first. It is possible that the four-room houses resembled the five-room front-gable ones (without the ell), and that ells were added soon after construction to provide a fifth room.

Each house had a full cellar with a coal-fired central heating unit, laundry facilities, and food-storage space. If the contour of the site permitted, part of the basement was devoted to the garage.³⁹ The interior finish of Penn-Craft houses was lath and plaster. During construction, narrow strips of wood were laid between the layers of stone and concrete. When the wall was finished, vertical strips of lath were nailed to them and covered with plaster. Homesteaders could choose between a smooth or rough finish, which was then painted. Floors were covered with 1-1/2" boards that, while time-consuming to lay, were very inexpensive. Since the homesteaders had little cash but a lot of time, they agreed to use the narrow boards.

The Friends shopped around to find the least expensive stoves, refrigerators, sinks, toilets, and bathtubs for the houses. The cheapest bathtubs, for example, were the kind with legs, although plans called for a built-in variety. The homesteaders merely removed the legs and used the cheaper tubs instead. Homesteaders always had the option to buy their own fixtures, but it was agreed that the individual family had to pay any difference in price themselves.⁴⁰

While the homesteaders had a great deal to say about their future homes, they were particularly vocal about room sizes. For the most part, everyone thought the houses too small. Even David Day complained about the room sizes, noting that they were smaller than the smallest houses at Westmoreland Homesteads. 41 Homesteader Walter Seeman, he reported, "seems dissatisfied with the plan of Type A house, designed for Lot 12. He feels that it is too restricted in room size and

³⁹U.S. Bureau of Labor Statistics, "Housing with Self-Help Features," Nonprofit Housing Projects

- United States, Bulletin 896 (1948), 41.

⁴⁰J. C. Carp, Jr., and Joe Shaw., interviewed by Margaret M. Mulrooney, 21 June 1989.

⁴¹According to the original plans of the Norvelt houses and measurements of the Penn-Craft houses, the Type 401 house at Norvelt had a 150-sq. ft. kitchen and 187-sq. ft. living room, compared to the 81-sq. ft. kitchen and 198-sq. ft. living room at Penn-Craft.

would rather forego immediate installation of all conveniences than restrict the size of rooms."⁴² Seeman preferred bigger rooms to an indoor bathroom. As at Norvelt, the issue of indoor bathrooms was hotly debated. To avoid additional cost, the Friends restricted placement of the bathroom to the first floor, yet this meant having a small kitchen and combined living-dining room. Homesteaders were unhappy about having small kitchens, since most were used to the larger kitchens found in company houses. Some used the downstairs bedroom as a dining room. When asked to choose between a bigger kitchen and a bathroom, though, "they have decided invariably in favor of the bathroom."

Little space was devoted to hallways. The front door opened into the living room, and the rear door into the kitchen. To avoid the problem of miners tracking dirt through the house on their way to the bathroom, some homesteaders installed a shower in the basement, reached through the garage. John Carp had a different solution. According to his son, Carp insisted that a small hallway be built, although this reduced the size of the bathroom itself.⁴⁴

The size of Penn-Craft houses often forced many homesteader families to make adjustments in their lifestyle. Although large families were accustomed to sharing beds and rooms, the situation was exacerbated at Penn-Craft, where rooms were considerably smaller. Joe Shaw recalled that his six sisters had to share the one bed that fit in their room, sleeping crossways to fit. Shaw himself shared a bed with two brothers. John Carp also erected a partition in one upstairs room for his children. Because of the wall, J. C. Carp, Jr., had to walk through his teen-aged sisters' bedroom to get to his own. Moreover, several persons interviewed remarked that it was difficult to move furniture into the houses, because of dog-leg stairways and low, angled ceilings. But most people suffered the transition gladly.

The selection of stone as the primary building material was based on both availability and cost. Ordinarily, stone construction is more labor-intensive than frame, and hence, more expensive. The prospective homesteaders, however, being unemployed or partially employed miners, had the time necessary to quarry their own stone. In addition, the Craft property bordered on two considerable deposits of sandstone. After careful investigation, the field staff concluded that substantial stone houses could be built as cheaply as frame dwellings, and would need less maintenance over time.

STONE CONSTRUCTION

At first, both the Friends and the homesteaders were satisfied with the choice of stone, but problems arose almost immediately, particularly the inexperience of the men in working with the material, and the amount of time it took to learn the proper skills. A professional mason, Max Gonano, was hired to oversee their work and to teach the men the finer points of stone construction, yet the traditional method of hand-laying stone walls proved excessively slow.⁴⁵ Another method of construction had to be found if the houses were to be built in a timely fashion.

⁴²Day to Morris, 13 July 1937.

⁴³AFSC, "Evaluation of Experiences," 5; Muriel Sheppard, <u>Cloud by Day</u> (Chapel Hill: University of North Carolina Press, 1947), 226.

⁴⁴Sheppard, 226; J. C. Carp, Jr.

⁴⁵Penn-Craft Tenth Year Anniversary.

The field staff, experimenting with alternative techniques, discovered a system of movable wood forms to erect the stone walls. Serving as both a guide to produce a straight wall and as a retainer for the stone and mortar, the forms were used to produce walls 16" thick in the cellar and 14" thick above ground. In this manner, the walls could be built much faster and with less supervision. According to Carp, who helped his father build their stone house, the exteriors were originally supposed to be whitewashed to imitate local farmhouses, but when completed, everyone agreed that the houses looked "better than they thought they would." Many homesteaders even went back and pointed the mortar, producing an exterior finish identical to that of hand-laid stone walls. Architect William Macy Stanton was pleased with the results, stating when he visited the site in October 1938 that, despite a lack of craftsmanship, the houses were better built than if the stonework had been let to a private contractor. 47

The lack of professional craftsmanship that Stanton noticed is not readily apparent to the casual visitor, but if one looks closely at certain houses, mistakes here and there are visible-especially if the owner points them out. Estel Debord's house is an excellent example. Located along one of the original roads leading into the community, the house belonged to his parents and has been little altered. Debord, a teenager when his parents moved to Penn-Craft from Bridgeport in 1938, took an active part in the construction of the community, and fondly recalled working on his own home. Gesturing toward a certain window, he called attention to the flat arch above it, noting that the bricks were slightly skewed and the joints uneven. "You can't find another window like that in the house," he said, "I learned how it's done on that one." Debord also indicated certain greenish stones in the walls, partially eroded from the weather. Then he went on to recount how he, his father, and the work crew were finishing the upper walls one day, when an old man passing by stopped to tell them, "Those green stones ain't no good for building." But the wall was almost done by then so "What could we do?" Debord shrugged, and pointed out the places where he has had to stabilize crumbling stonework with concrete over the years. Several times he explained, "We just learned as we went along," indicating that mistakes were considered a valuable part of the learning experience. 48 But perhaps more important, the mistakes made by the homesteaders as they struggled to build their own homes imparted a sense of individuality and character to the houses; thus, the involvement of the homesteader and his family in the construction process enabled each family to personalize an otherwise standardized plan.

Of all the homes in the community, that of the Billiani family is perhaps the most distinctive. An experienced stonemason, Raymond Billiani came from a nearby patch called Lambert, where he was employed primarily to repair coke ovens. These skills translated easily to house construction, and Billiani joined Gonano, the professional mason, as a construction foreman. Although the homesteaders had already switched to the form system, Billiani proposed to construct his house in the traditional manner. It would take longer, and he would have to do much of the work himself, but the Friends permitted him to do so. Excavation of the cellar began in 1940 and by the end of 1941 most of the walls were finished. Hurrying to complete the upper walls and get a roof on the house before winter, Billiani deliberately omitted a small gable window in the rear of the house. He also left out the flat brick arch over each window, preferring the uninterrupted expanse of stone instead. Bona Billiani recalled watching her husband lay the stones while helping to mix the mortar, and modestly

⁴⁶J. C. Carp, Jr.

⁴⁷Homer Morris, "Memorandum on Trip to Penn-Craft," 3 October 1938, AFSC Archives.

⁴⁸AFSC, "Evaluation of Experiences," 8; Estel Debord.

said that the distinctive rough-faced stone and gable-roofed vestibule with round-arched opening at the front door were her ideas. Some changes were also made to the interior although "you were supposed to do it like the blueprint." These changes included a partition that divided one of the upstairs bedrooms into two rooms for the Billianis' children. When Raymond Billiani died in 1942, Bona assumed responsibility for completing the family home, and either asked or paid neighbors to help, "a bit at a time." The house, distinguished by its exceptional stonework, was finally ready for occupancy in 1945.⁴⁹

B. Site:

- 1. Historic landscape design: Like many of the Division of Subsistence Homesteads communities, Penn-Craft was laid out in an irregular plan to take advantage of the rolling hills of western Pennsylvania. The community was designed around several existing buildings, including the original nineteenth-century Craft farmhouse and barn. As at Norvelt, the community was surrounded by the cooperatively run farm-here occupying about 110 acres. The fifty homesteads, averaging about two acres each, were laid out along four cul-de-sacs, called sections, extending from both sides of an existing township road. The circles at the end of each cul-de-sac caused the houses to be placed at angles to each other. Five different house designs, featuring front-gable and side-gable roofs, added further variety to the landscape. This contrasted dramatically to the homesteaders' former communities, where straight rows of identical miners' houses marched uniformly along the street.
- 2. Outbuildings: Temporary houses, later converted to poultry houses, were erected on the site of each structure. Like the stone houses, the temporary houses were small. As built, the temporary houses measured 20' x 20' and had one big all-purpose room with a coal stove in it, plus a small unheated bedroom.

In some cases, a 10' x 12' brooder house was attached to one end of the structure for extra space. The uninsulated walls, made of 2" x 4"s, were clad with board-and-batten siding outside and tongue-and-groove boards inside.

PART III. SOURCES OF INFORMATION

A. Graphic Material:

Historic photographs from the American Friends Service Committee Archives.

Additional historic photographs are reproduced in Muriel Sheppard, <u>Cloud by Day</u> (Chapel Hill: University of North Carolina Press, 1947), after page 238.

⁴⁹Bona Billiani, interviewed by Margaret M. Mulrooney at Penn-Craft, 21 June 1989.

B. Interviews of Penn-Craft Residents:

Conducted by Margaret M. Mulrooney:

Bona Billiani, 21 June 1989 J. C. Carp, Jr., 21 June 1989 Dorothy Dankovich, 20 June 1989 Estel and Mary Debord, 21 June 1989 Robert Jameson, 20 June 1989 Rev. Thomas Logston, 21 June 1989 Joe Shaw, 21 June 1989

Conducted by Alison K. Hoagland:

Jenny Balog, 6 May and 25 June 1991 Stanley Marks, 8 May 1991 Rod Schad, 8 May 1991 Rev. Thomas Logston, 8 May 1991 Joe Nosky, 8 May 1991

C. Bibliography:

American Friends Service Committee Archives. Correspondence concerning Penn-Craft.

American Friends Service Committee. Annual Reports. 1931-47. AFSC Archives.

- . "Evaluation of Experiences at Penn-Craft During Three-Year Period 1937-
- Day, David. "Memorandum to Homesteaders." 27 May 1936. Photocopy in possession of Louis Orslene, Jr., Fairbank, Pa.
- Kaplan, Stella A. "Recent Developments in Housing for Bituminous Coal Miners." M.A. thesis, University of Pittsburgh, 1945.
- Orslene, Louis, and Susan Shearer. "National Register Nomination: Penn-Craft Historic District." National Park Service, 1989.
- The Penn-Craft 1 (25 May 1939), in possession of Rev. Thomas Logston.
- "Penn Craft Community 50th Anniversary 1937-1987 Yearbook." Louis Orslene and Thomas Logston, comps., and Foresta Logston, ed. 1987.
- Penn-Craft Tenth Year Anniversary, 1937-1947. Penn-Craft, privately printed, 1947.

Pickett, Clarence. For More than Bread. Boston: Little, Brown and Co., 1953.

Richardson, Frederick L. W., Jr. "Community Resettlement in a Depressed Coal Region."

Applied Anthropology (October-December 1941): 24-53.

"Self-Help Cooperative Housing." Monthly Labor Review 49 (September 1939): 566-577.

Sheppard, Muriel. Cloud By Day. Chapel Hill: University of North Carolina Press, 1947.

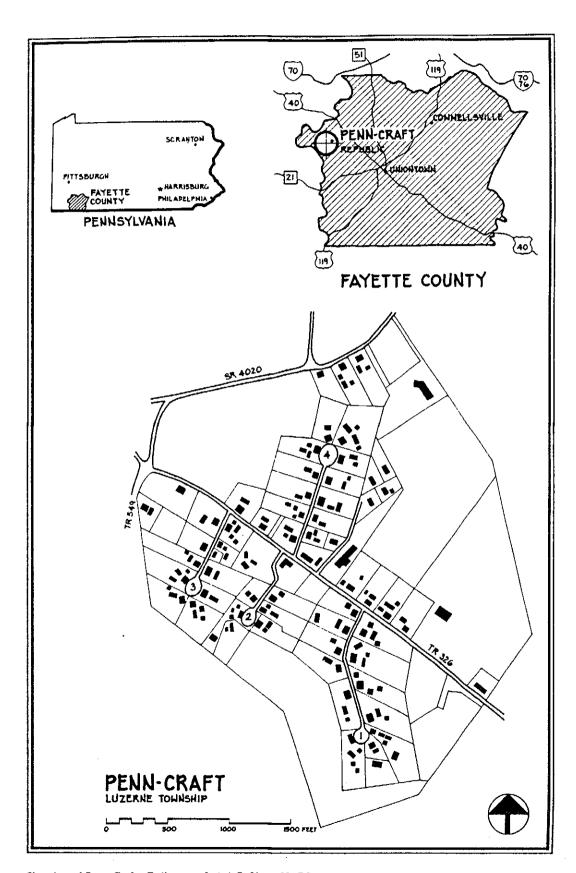
U.S. Bureau of Labor Statistics. "Housing with Self-Help Features." Nonprofit Housing Projects - United States. Bulletin No. 896, 1948.

PART IV. PROJECT INFORMATION

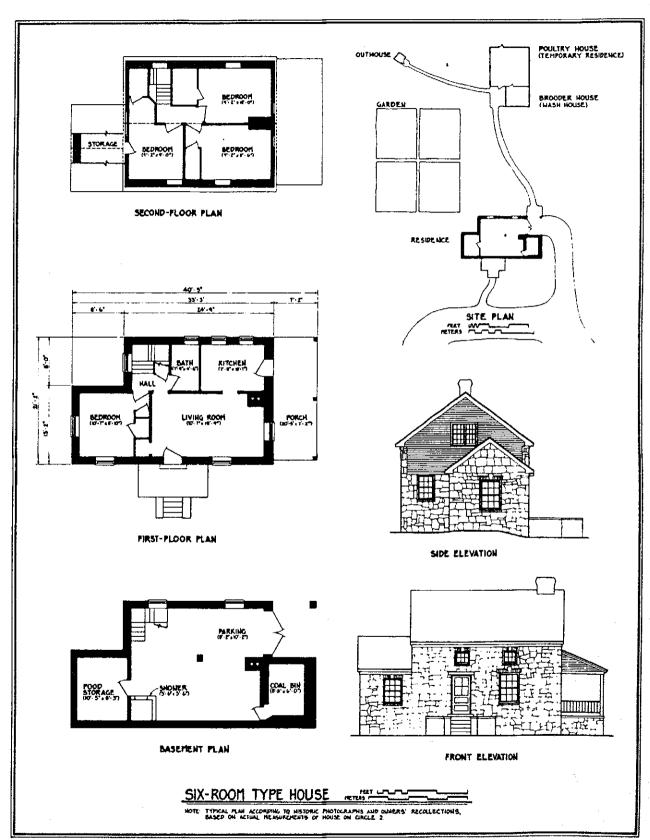
This report is part of a larger project undertaken in 1989 to document the towns of Penn-Craft and Norvelt, Pennsylvania. The project was initiated by the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER), Robert Kapsch, chief, in cooperation with the America's Industrial Heritage Project (AIHP), Randall Cooley, executive director. Both HABS/HAER and AIHP are agencies of the National Park Service, U.S. Department of the Interior.

The project was prepared by Margaret M. Mulrooney, HABS historian, and Alison K. Hoaglund, HABS senior historian. Isabel Yang, HABS architect, produced the architectural drawings, and David Ames of the University of Delaware took the large-format photographs in 1991. The information contained within this report was originally published as Norvelt and Penn-Craft, Pennsylvania: Subsistence-Homestead Communities of the 1930s (Washington, D.C.: HABS/HAER, National Park Service, 1991). This manuscript also contains historic photographs of Norvelt, Penn-Craft, and other government subsistence homesteads.

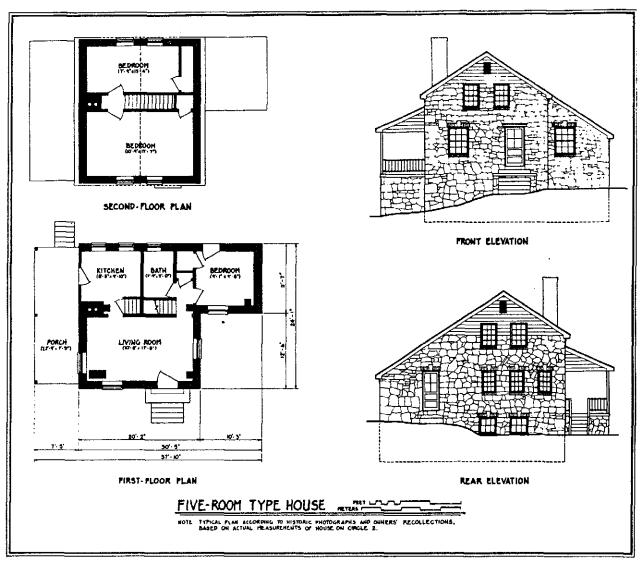
Other HABS documents produced from the original published project include HABS No. PA-5919, Subsistence Homestead Towns, Penn-Craft, Fayette County, and Norvelt, Westmoreland County, Pennsylvania; and HABS No. PA-5921, Town of Norvelt (Westmoreland Homesteads), Norvelt, Westmoreland County, Pennsylvania, held at the Library of Congress, Prints and Photographs Division. Additional research material, 35mm field photographs and historic photos have been forwarded to the AIHP Collection within the Special Collections Division of the Stapleton Library at the Indiana University of Pennsylvania.



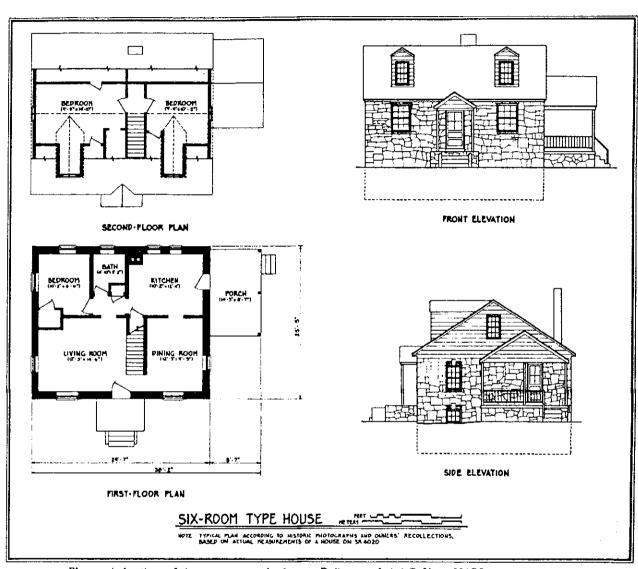
Site plan of Penn-Craft. Delineator: Isabel C. Yang, HABS.



Plans, elevations, and site plan of six-room, L-plan house. Delineator: Isabel C. Yang, HABS.



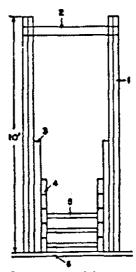
Plans and elevations of five-room house with front gable, shed-roofed ell. Delineator: Isabel C. Yang, HABS.



Plans and elevations of six-room, rectangular house. Delineator: Isabel C. Yang, HABS.

APPENDIX A.—Movable Forms Used in Laying Stone Walls at Penn-Craft

The following sketches, with explanatory material, snow how simple forms were devised to aid unskilled workmen to lay stone walls for their houses at the Penn-Craft project.

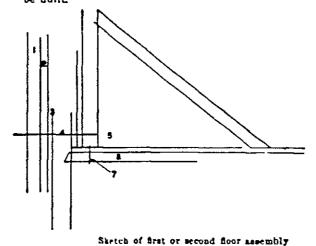


- Form post: Made of 2-2 x 4-10 spiked or bolted together with 4" iron pin fastened in bottom end, extending through bottom cross board #6.
- 2 Top cross board—Any one inch scrap piece ualled on the two poats to hold them at same width apart aa at bottom.
- 2 x 2 Release stick—Approx. S6" long. Is the key board for unlocking forms when ready to move the board upward for the next set.
- 4. 2 x 10 form plank: These boards form the inside and outside walla of the form against which the stone is inid. These planks can be used later for floor joist or whatever they may be needed for. A few of them will have to be cut to fit short jogs in the walls.
- 5. 2 x 2 Release blocks: These blocks are cut the exact width of the wail that one desires to build. Their job is to boid the form plank anugly sgainst the 2 x 2 release sticks until stone is iaid in the form at which time the release blocks are removed or moved to a new place which needs temporary blocking.

Cross section of forms and posts.



6. Bottom cross board: This hoard is used in starting basement waits on the clay floor of the foundation. No footer is needed where a solid 16" stone wall is to be huilt. The cross-board is drilled to receive the ½" pins in the ends of the form posts as shown in the sketch below. This board is left in the wall. It need not be anything more than a scrap piece of 1" board sufficiently long to serve the purpose. The length will depend upon the width of the wall to be built.



- 1. Form post.
- 2. Release stick.
- 3. Form plank.
- Wire (#9) to hind outer poat to inner post.
- 5. Subfloor.
- 6. Floor joist.
- Iron pin in end of post-bole drilled in aubfloor to bold it firm.
- Brace to aubfloor to keep wall plumb.

Diagram of forms used for stone construction. From U.S. Bureau of Labor Bulletin 896 (1948), 49.